

CLAIMS

1. A method of stabilizing a slit fluid jet, comprising superimposing a fluid jet accompanied with a flip-flop phenomenon upon one, or both, of the surfaces of a slit fluid jet and thereby forming a stable said slit fluid jet.

2. A stabilizing device for stabilizing a slit fluid jet, the stabilizing device being adapted to stabilize the slit fluid jet of claim 1, comprising being equipped with two flat plates that oppose each other with a prescribed gap in between, one of the flat plates of the slit having an opposing surface that is smooth, the other having a network structure that has a plurality of crossed grooves that are crossed like a letter x.

3. A stabilizing device for stabilizing a slit fluid jet according to claim 2, wherein at an outlet of the fluid there are disposed flow passages of the network structure so that the fluids may be merged in.

4. A stabilizing device for stabilizing a slit fluid jet according to claim 2 or 3, wherein the length between a detached vortex, occurring at the back of the crossed groove portion, and a point to that the detached vortex has been shifted is equal to or greater than the length of one side of a diamond-shaped protruding portion that is formed by the x-shaped grooves.